# CITY OF DANVILLE PROJECT DESCRIPTION FY 2011 FIVE-YEAR CIP

**DEPARTMENT/DIVISION**: Utilities/Electric-Load Management

PROJECT NAME: Distribution Automation System (PL # 60402)

PROJECT SCOPE: This project expands real-time monitoring and control of the entire electric system down to the customer level. The upgraded SCADA system dynamically displays the entire transmission and distribution system in real-time and incorporates automatic distribution field device switching based on real-time operating parameters without human intervention, reducing power outages to minutes compared to hours for the portions of the distribution system that are not directly affected by the outage. The Outage Management System (OMS) continuously monitors the distribution system and reports any anomalies to the System Operator. The OMS also has the ability to provide suggested switching solutions for line sections that do not have automated field switches. This feature enables faster response and switching orders based on actual pre-outage conditions rather than "standing switching orders" to transfer load. The interface to the Interactive Voice Response system provides real-time customer service status; automates customer call back; automates crew call outs; and provides advanced trouble-order management with historical data archiving of each customer's service status.

**CURRENT SITUATION**: Presently all outages and service interruptions are determined by the customer's telephone call into the Operation Center. The customer's service location is determine by referencing the legacy customer service information and paper service area maps. After the location is determined the Line crew or Service Crew is dispatched to the outage location.

HOW WILL THE COMPLETED PROJECT AFFECT THE CURRENT LEVEL OF SERVICE? T

IS THE PROJECT MANDATED BY FEDERAL OR STATE REQUIREMENTS? IF SO, PLEASE PROVIDE DETAILS OF THE MANDATE: No IS THE PROJECT THE RESULT OF A CITY INITIATED STUDY OR PLAN? IF SO, PLEASE PROVIDE DETAILS OF THE STUDY OR PLAN: No OTHER COMMENTS:

Source of Funding	Pr	oj. to Date	FY 2011	FY 2012		FY 2013	FY 2014	FY 2015	Total
Current Revenues -					1				
Reprogrammed Funds	\$	680,000	\$ -	\$ -	\$	_	\$ 	\$ 	\$ 680,000
Bonds-General Obligation		<u></u>	=	1,000,000		1,250,000		-	2,250,000
Other		<u>'</u>	2	-		-	-	-	-
Total	\$	680,000	\$ _	\$ 1,000,000	\$	1,250,000	\$ -	\$ -	\$ 2,930,000

#### Project description by fiscal year:

Fiscal Year	al Year Description				
FY 2011	N/A	800,050 0.004,000,00			
FY 2012	Provide approximately 50 upgrades to distribution field devices at \$20,000 each				
FY 2013	Provide approximately 65 upgrades to distribution field devices at \$20,000 each				
FY 2014	N/A				
FY 2015	N/A	1915			

## CITY OF DANVILLE PROJECT DESCRIPTION FY 2011 FIVE-YEAR CIP

 DEPARTMENT/DIVISION:
 Utilities/Electric-Load Management
 PROJECT NAME:
 Meter Data Management System (MDMS)

 (PL # TBA)

PROJECT SCOPE: Implementataion of MDMS and Analytics System

**CURRENT SITUATION**: The Automated Meter Infrastructure project will allow the City to offer Time-Of-Use and Demand side management rates to its customer base. In order to develop these rates we need a miniumum of data at a minium of one hour increments or less. Meter Data Analytics will deliver extensive reports to Utilities and our customers. It can monitor load, track energy usage and implement demand corrective steps. It will allow Utilities to monitor quality and quantity of energy consumption for achieving increased enery efficiency. The MDMS is fairly new on the market and with an increased number of AMI projects the City expects the cost of the system and implementation to become less expensive as technology advances.

# HOW WILL THE COMPLETED PROJECT AFFECT THE CURRENT LEVEL OF SERVICE? T

IS THE PROJECT MANDATED BY FEDERAL OR STATE REQUIREMENTS? IF SO, PLEASE PROVIDE DETAILS OF THE MANDATE: No IS THE PROJECT THE RESULT OF A CITY INITIATED STUDY OR PLAN? IF SO, PLEASE PROVIDE DETAILS OF THE STUDY OR PLAN: No OTHER COMMENTS:

Source of Funding	Proj. to Date	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Total
Current Revenues -	, <b>,</b>	\$ 350.000		\$ -	s -	\$ -	\$ 350,000
Reprogrammed Funds Bonds-General Obligation	-	\$ 350,000	1,500,000	-	-	_	1,500,000
Other	-		-	-	-	×-	-
Total	\$ -	\$ 350,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 1,850,000

### Project description by fiscal year:

Cianal Vanu	Description						
Fiscal Year							
FY 2011	Outsource the MDMS program for one year						
FY 2012	Implement City's MDMS and Analytics						
FY 2013	N/A						
FY 2014	N/A						
FY 2015	N/A						